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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,925	04/13/2004	Samuel Ponjican	20501/565	3566

32847 7590 09/26/2005

SETTER OLLILA, LLC
2060 BROADWAY
SUITE 300
BOULDER, CO 80302

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,925

Applicant(s)

PONJICAN ET AL.

Examiner

Frank M. Lawrence

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 10-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornett (3,513,642).

3. Cornett '642 teaches a centrifugal dust separator comprising a cylindrical separator chamber (6) with a lower conical separator section (7), an offset airflow inlet (9) radially outside of the radial distance to the chamber wall, a tapering lead-in track (22) extending from the inlet and partially around the separator circumference to the separator interior, a lower outlet (8), an air inlet tube (12, 13) having an opening extending into the lower conical section to above the lower outlet and being capable of housing an impeller, and an intercepting baffle (11) on the lower inner surface of the chamber wall (see figures).

4. Claims 1-5, 7, 10-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Boadway (4,842,145).

5. Boadway '145 teaches a cyclone for removing liquid particles from a gas flow, comprising a cylindrical separator chamber (2) with a lower conical separator section (3), an offset airflow inlet (1) radially outside of the radial distance to the chamber wall, a tapering lead-in track (1A) extending from the inlet and partially around the separator circumference to the separator interior, a lower liquid outlet (11), and an air exhaust tube (5) having an opening above

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the liquid outlet and being capable of housing an impeller (see figures 1, 2, col. 1, lines 18-21, col. 3, lines 14-40).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boadway '145 in view of Brottgardh et al. (5,669,948).

8. Boadway '145 discloses all of the limitations of the claims except that the air inlet tube includes a liquid deflector skirt extending downwardly and outwardly. Brottgardh '948 discloses a centrifugal air/liquid separator including a deflector skirt (7) extending downwardly and outwardly from the air exhaust tube (6) (see figures, col. 3, lines 21-23). It would have been obvious to one having ordinary skill in the art at the time of the invention to include the deflector skirt of Brottgardh '948 in the separator of Boadway '145 in order to provide a means for preventing drops from traveling down and into the tube.

9. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boadway '145 in view of Oh et al. (2003/0213091).

10. Boadway '145 discloses all of the limitations of the claims except that the air inlet tube includes one or more vanes. Oh et al. '091 disclose a cyclone separator including a spiral guide vane (444) inside of the air outlet tube (see figures 8, 9, paragraph 52). It would have been obvious to one having ordinary skill in the art at the time of the invention to include the guide

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vane of Oh et al. '091 in the separator of Boadway '145 in order to provide a means for guiding cleaned air out of the separator.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose centrifugal separators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

Frank Lawrence
8-2-05

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